STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

ILLINOIS INDEPENDENT TELEPHONE ASSOCIATION Petition for initiation of an investigation of the necessity of and the establishment of a Universal Service Support Fund in accordance with Section 13-301(d) of The Public Utilities Act.	)	Docket No. 00-0233
ILLINOIS COMMERCE COMMISSION On Its Own Motion Investigation into the necessity of and, if appropriate, the establishment of a universal support fund pursuant to Section 13-301(d) of The Public Utilities Act.	)	Docket No. 00-0335

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REBUTTAL TESTIMONY

OF

ROBERT C. SCHOONMAKER

ON BEHALF OF

THE ILLINOIS INDEPENDENT TELEPHONE ASSOCIATION

June 15, 2001

Q. Please state your name and business address.

A. My name is Robert C. Schoonmaker, and my business address is P. O. Box 25969, Colorado Springs, Colorado 80936.

Q. By whom are you employed and in what capacity?

A. I am a Vice President of GVNW Consulting, Inc., a consulting firm specializing in working with small telephone companies.

Q. Are you the same Robert C. Schoonmaker who previously filed Direct and Supplemental Direct Testimony in this phase of these consolidated dockets?

A. Yes, I am.

Q. What is the purpose of your Rebuttal Testimony?

A. In my Rebuttal Testimony, I will be responding to both the Direct and Rebuttal Testimony of various Staff witnesses and the witnesses for AT&T, MCI/WorldCom, Sprint, Ameritech and Verizon. My Rebuttal Testimony, on behalf of the IITA, will respond to the testimony of the other witnesses except my response to testimony directed at the individual small company rate-of-return showings filed by other witnesses on behalf of the respective individual small companies will be limited to Staff's proposed federal USF support adjustment.

While a substantial volume of testimony and recommendations (some conflicting) have been submitted by the various witnesses, my Rebuttal Testimony is organized so as to respond to the following topics and issues: (1) the appropriate inputs to the HAI Model 5.0a; (2) how the HAI Model results should be used in this proceeding; (3) the services to be supported; (4) the affordable price for the supported services; (5) access charge issues; (6) Staff's transition plan; (7) the ISCECA as the initial fund administrator; (8) fund administration issues; (9) funding methodology issues; (10) administration of any Commission ordered "true-up" and (11) a response to the Staff proposed adjustment to federal USF amounts used in the individual company earnings analysis.

Q. Prior to addressing the issues and topics discussed above, do you have any general comments or concerns related to the testimony and positions of the Staff witnesses and the witnesses for the other parties?

A. Yes, I do. In an investigation such as this that potentially impacts 50 small companies and involves numerous and complex issues, unfortunately, it is easy to lose sight of the impact on individual companies and the individual customers of those respective companies. In my opinion, every effort should be made to make certain this does not occur in the considerations and determination of the issues involved in this proceeding.

In that regard, it bears repeating that this proceeding concerns the establishment of a <u>new</u> Universal Service Fund for the high cost rural areas served by the small companies. As described in my Direct Testimony, this new Fund will replace two existing funds; i.e., Illinois High Cost Fund and the DEM Weighting Fund. In the year 2000 (the year for which the rate-of-return showing is presented on an individual company basis), the small companies received a total of $3,000,000 from the Illinois High Cost Fund and a total of $10,385,264 from the DEM Weighting Fund, resulting in total support of $13,385,264.

The Illinois High Cost Fund, which has been capped at $3,000,000 since the mid-1980's, covers non-traffic sensitive costs, such as loop costs, that were removed from access charges (the intrastate Carrier Common Line Charge) where those costs were greater than the Commission then determined to be appropriate to pass on to customers in monthly rate increases. The small companies' investment in non-traffic sensitive plants have continued and the costs have grown to levels in excess of the "capped" amounts.

It should also be remembered that the DEM Weighting Fund was to replace on an intrastate basis revenue dollars that the small companies previously received in intrastate access charges. Each of the companies' reductions in access charges have from the first year of the fund and each year thereafter exceed the amount of what the companies received from the DEM Weighting Fund.

As shown on Attachments #1 and #2 to IITA Exhibit 2.0, on the average, companies received a total of $9.59 per line, per month from the existing funds with certain companies receiving support in excess of $60.00 per line, per month.

Taking the above history into account, in my opinion, it should not be surprising that the rate-of-return showing presented by the individual companies shows, on a collective basis, a need of $14,567,114 (IITA Exhibit 3.0, Attachment #4) from a new Universal Service Fund to replace the existing sources of funding. This is at a rate-of-return level not just as proposed by the small companies but at a level agreed to by the Staff of the Commission as a result of discussions and negotiations.

However, the positions in testimony presented by the Staff and the witnesses for the other Intervenors seems to be focused by whatever means or issues are available to "bid down" the amount of any new Universal Service Fund and the amount of high cost support available.

Q. Has there been any attempt to quantify the impact that the establishment of an IUSF of the size similar to that shown in IITA Exhibit 3, Attachment 4 would have on end user customers?

A. Yes. The IITA submitted a data request to staff witness Clausen requesting an estimate of the Illinois intrastate retail revenues. Attached as IITA Exhibit 4, Attachment 9, is Mr. Clausen's response to that data request. As can be seen from the response, Mr. Clausen estimates that 2000 intrastate retail revenues (excluding wireless revenues) was approximately $4.622 billion. Mr. Clausen further estimates that a $12 million IUSF fund would require an surcharge on end user retail revenues of 0.26%. On an telecommunications bill for $30 in a month this would equate to a surcharge of $0.078 per month or between $0.90 and $1.00 per year.

Q. Have you calculated the estimated surcharge percentage based on a $14.6 million IUSF fund?

A. I have. Using Mr. Clausen's estimate of $4.622 billion as the intrastate retail revenues a fund of $14.6 million would require a surcharge of approximately 0.32%. This would equate to a monthly surcharge on a $30 retail bill of $0.096.

Q. What is your assessment of the benefits of such a fund?

A. I believe that the fund would provide substantial benefits to customers of the small Illinois companies in keeping their end user local rates affordable without placing undue burdens on customers in the rest of the state. Nine to ten cents per month is not a substantial amount for customers to pay to assure access to customers in the rural parts of the state.

HAI INPUT ISSUES

Q. Before discussing the issues related to the HAI inputs in detail in response to the direct testimony of the witnesses, do you have any general observations related to the testimony regarding the HAI inputs?

A. Yes. I believe that this whole discussion highlights the questionable validity of the costs produced by forward-looking cost models and the substantial difficulty that using these costs can cause. While from an economic perspective, there is an attractiveness from a theoretical standpoint for using forward-looking costs. However, in practical implementation there is a wide disparity of opinions and, in some cases, data available that can make wide variations in the forward-looking cost. This leaves the Commission in the difficult position of trying to sort out from a variety of data, the appropriate inputs to use based on conflicting data from a variety of sources and presented by various parties that may have inherent biases in the desired results and thus the data they choose to present.

Q. Is the universe of companies that are the subject of this proceeding relative to the evaluation of the inputs?

A. It certainly is. This proceeding is about the forward-looking costs results of less than 50 small telephone companies in Illinois. The largest, in terms of access lines, is Harrisonville Telephone Company which serves approximately 20,000 access lines. The average lines per company is around 2,500 lines. These companies are very different from the large Bell Operating Companies which serve the vast majority of the lines in the country and whose operations were the primary focus of the model development. When one reviews the alternative input data proposed, the target of the default assumptions, and the companies included in this analysis should be a major consideration.

Q. Does Staff witness Koch recognize this in his testimony?

A. I do not believe that he does. On pages 19 and 21 of his direct testimony, for example, he indicates that the IITA does not adequately justify changes for some inputs, in fact, most of the input changes that we proposed. His reason for believing that these changes are not justified is that they are based on small groups of Illinois companies rather than all the small Illinois companies.

However, he fails to recognize that the default inputs for these items are based on estimates of the costs primarily of non-Illinois companies, and virtually no companies that are of the size that are the primary focus of this proceeding. Mr. Koch simply accepts the default assumptions as being appropriate when they have no relevance to the companies being studied.

Q. Can you provide a specific example of this?

A. Yes, the change in the ratio of the COE switching expense and transmission expense ratios to investment that is proposed as item # 12 in the assumption changes I outline in IITA Exhibit 2, Attachment #3 is based on an analysis of the current actual expenses of the small Illinois telephone companies. The default assumptions, as described in the HAI Input Portfolio document, IITA Exhibit 1, Attachment 3, for these two inputs are based on a 1993 study of incremental costs of New England Telephone Company in New Hampshire. Mr. Koch makes no explanation as to why this eight-year old study of costs of the BOC in New Hampshire is more representative of Illinois costs than are the costs of the Illinois companies themselves. I do not find the support for the default assumptions persuasive at all.

Q. Mr. Koch also criticizes your input changes because they "...inflate the economic cost of services eligible for USF support..." and because they "...produce significant increases in costs."[1] Can you respond to these criticisms?

[1] Koch Direct Testimony, p. 20.

A. While Mr. Koch is correct that the overall results of the assumption changes that I make increase the cost from costs developed under the default assumptions. The question of whether that, by itself, invalidates my input changes should not be judged simply by the results, but by the rationale for making those changes. It should not be surprising that the costs for providing service in rural areas and small companies is higher than the average costs for serving BOC size companies in areas dominated by urban operations. Furthermore, Mr. Koch has simply accepted the default assumptions as the appropriate base to compare to when making these assertions and assumes that the higher results reflects a bias on my part. He makes no attempt to evaluate the potential bias of the developers of the HAI model and its default inputs. The firms who developed and presented this model are AT&T and WorldCom (formerly MCI). These companies were concerned with the results of forward-looking models as potential payors into universal service funds and potential payors of unbundled network element rates. Thus there is at least as great a potential that the default inputs are biased in a downward basis as there is that the IITA inputs are biased in an upward basis.

Q. Can you provide any evidence that the input changes that you propose have some degree of neutrality in regard to bias?

A. I can provide evidence to that effect. In response to a data request submitted by Commissioner Kretschmer, the IITA calculated the impact on the universal service cost of each of the twelve categories of input changes proposed by the IITA, calculating a weighted average for the IITA companies as a whole using the companies actual access lines as a basis for weighting. The results of this analysis are presented in IITA Exhibit #3, Attachment 1. Of the twelve categories of input changes proposed by the IITA only seven of the twelve produced increases in costs while four caused decreases. This provides evidence that I did not solely choose changes which would increase the costs. Further evidence of the rationale for each of these proposed changes is provided in detail in my direct testimony. In most of the cases, specific factual reasons for making the changes related to the difference of conditions among these small companies and in Illinois specifically provide the basis for the proposed changes.

Q. In regard to Mr. Koch's comments regarding the "upward bias" of the IITA assumptions, do you have any observations from Attachment 1 that are relevant to those comments?

A. Yes. While Mr. Koch rejects eight of the twelve assumption changes made by the IITA he supports the two that have by far the largest impact in increasing the cost causing the "upward bias" that he has concern about. Furthermore, two of the eight assumption changes that he rejects actually reduce the USF cost. If the Commission will study the rationale I have given for making the changes I have proposed, I believe that they will find that these are well founded, regardless of the overall impact of causing the costs to increase from those generated by the AT&T sponsored default assumptions.

Q. Both Mr. Koch and AT&T witness Clarke criticize and reject a number of your input assumptions because they say they are based on an analysis that uses embedded costs and thus are not representative of forward-looking costs. What is your response to this criticism?

A. I recognize that embedded costs are not always indicative of forward-looking costs, particularly if the current forward-looking technology is different from the embedded technology. Thus, the use of embedded costs for analysis or comparisons in determining forward-looking costs must be done with some care. However, there are valid uses for embedded costs or current costs in helping to determine forward-looking costs or the validity of forward-looking cost estimates. The HAI model developers themselves, for example, used the relationships between investment and expense accounts for many of the plant accounts as the basis for estimating the forward-looking expenses for many accounts.

Q. Can you give some examples of places where embedded costs may be indicative of the forward-looking costs or may be used in analyzing forward-looking costs of various investments or expenses?

A. Yes. I can give several. Let's take land and buildings, for example. These are assets with fairly long lives. They are also assets where the values have increased substantially over time. If the quantities of land and buildings are reasonably close to those owned by the telephone company, one would generally expect that the embedded cost of land and buildings would be less than, possibly substantially less than the forward-looking cost of the same assets. If one compares the forward-looking estimate with the embedded cost and finds a similar relationship, some confidence can be gained in the forward-looking estimate. If, however, the forward-looking estimate is substantially less than the embedded cost, serious question could be raised as to the validity of the forward-looking estimate and the estimating technique.

Motor vehicles provides another example. These assets have relatively short lives, five to eight years typically, with modest price increases over the past few years. One can generally observe that there have not been significant technology changes in this area which would change the need for these assets in providing service. One could thus generally assume that the forward-looking cost of vehicles would be modestly higher than the embedded cost. If the forward-looking cost is twice the embedded cost, or half of it, it is not unreasonable to use this type of comparison to conclude that the forward-looking estimate is flawed and that a different estimate reflective of more realistic conditions is appropriate. The analysis I did in recommending the change in inputs for COE switching expense and COE transmission expense is another example. For most plant specific expense categories, the HAI developers used relationships between current expense and investment as the basis for estimating forward-looking expenses. However, in these two categories they introduced an override factor that reduced those relationships based on a now eight-year old New Hampshire study of New England Telephone Company that indicated an estimated ratio of expense to investment of .0269 for COE switching equipment and .0153 for COE transmission equipment. Based on my analysis that for the Illinois small companies these ratios in 1998 were 7.78% and 8.25% respectively, I changed the inputs for these items to 7% and 7.5% respectively. I believe these changes were appropriate in reflecting the forward-looking cost of the Illinois companies and are much more representative than is the New Hampshire data. These estimates are based on current costs and investment. I am not aware, nor has Mr. Koch or Dr. Clarke asserted that there are any significant technological changes in the immediate future that will significantly change the cost of maintaining this equipment. The equipment in service today is similar to the forward-looking equipment being modeled. If, as Dr. Clarke asserts, the forward-looking cost of COE switching investment is less than the embedded investment, if anything the expense factor relationship should be higher on a forward-looking basis than the embedded relationships. My estimate conservatively allowed for some productivity improvement and a lowering of the ratio from the current embedded level. I believe that this type of analysis is a correct and appropriate use of comparisons to embedded data to test the validity of forward-looking assumptions, particularly related to this small group of rural companies.

Q. Does the analysis you used in developing your proposed input for central office switching investment provide another example?

A. It certainly does, and an important one. COE switching investment is generally the second largest investment category for a small company. As I indicated in my direct testimony, a comparison between the HAI default assumption results for

COE switching investment and the actual investments of the company showed that the forward-looking estimates were slightly more than 50% of the actual 1998 company investments. The default results were $38 million as compared to the $72 million in actual investments. The actual investment in COE switching for the companies in 2000 was $80 million. The results of the assumptions I recommend show a COE investment of $67 million, approximately 6% less than the actual 1998 investment and approximately 16% less than the actual 2000 investment. Those estimates are sufficiently under the actual embedded investment to reflect some reduction in the forward-looking cost, if there is some, but, I believe, are much more realistic than are the default assumptions.

Q. AT&T Witness Clarke defends the switching assumptions in the HAI model 5.0a by stating that "…switching costs modeled pursuant to the FCC Synthesis model's algorithms and data compare closely with those modeled by the HAI 5.0a model using its default input values."[2] Do you have evidence to present regarding this statement?

A. Yes, I do. As indicated earlier, the HAI 5.0a default assumptions produce a COE switching investment for the Illinois companies of $37 million. The FCC Synthesis model, using its default assumptions generates COE switching investment of $51 million, approximately 34% greater than the HAI model. I wouldn't consider a 34% difference something that "closely compares". However, the $67 million COE switching investment generated by the IITA assumptions is approximately 34% greater than the Synthesis Model assumptions.

If one can say that the HAI model assumptions "closely compare" to the Synthesis Model assumptions, then the IITA assumptions also "closely compare" to the Synthesis Model.

Q. Dr. Clarke also criticizes the comparison of forward-looking costs because "...embedded switching accounts contain investments for equipment beyond just end-office switches (e.g., tandem or packet switches)."[3] Do any of the Illinois companies have investments in tandem or packet switches?

A. No, they do not. Thus, this concern which may apply to the BOCs is not relevant to my comparison. Dr. Clarke's statement that targeting modeled switching costs to the embedded costs is "...sure to result in an overestimate of the forward-looking cost of end office switching..." is unjustified and inaccurate in relation to the small Illinois telephone companies.

Q. Dr. Clarke refers to HAI model versions 5.1 and 5.2 in his discussion of switching costs and in other parts of his testimony. Could you comment on his references to these versions of the HAI model?

A. Yes. In his discussion of switching costs he compares these models to the FCC Synthesis Model and its results which he asserts "closely compare" to the HAI 5.0a model. He seems to be trying to bolster the use of the 5.0a default assumptions by referring to the newer versions of the model. In other parts of his testimony he refers to these models to justify assumptions which differ from

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[2] Clarke, Testimony-May 11, 2001, p. 8, Lines 17-19.
[3] Clarke, Testimony-May 11, 2001, p. 9, Lines 3-4.

default assumptions for HAI 5.0a and even indicates that he will provide sample results from these versions.

The fact is that these models are not available for use in Illinois, cannot be evaluated, and should have no relevance to this proceeding. The IITA submitted a data request to AT&T requesting documentation for these models, copies of the models themselves, and the data to run them for the Illinois companies. In response to this data request, AT&T provided documentation for version 5.2 of the model only. In regard to the models themselves after explaining that to run these models data would need to be purchased from an outside supplier, which AT&T has not done, it concludes its response to the request for copies of the models by stating, "AT&T does not have the required data nor a version of either the HAI 5.1 or 5.2 model that is operational for Illinois." Neither copies of the models or the data to operate them was provided. Since these models are not operational for Illinois and cannot be evaluated, the Commission should not give any weight to references to these models.

Q. Dr. Clarke spends considerable time criticizing the plant type assumptions proposed by the IITA and the recommendation to choose a higher level of buried plant. Could you comment on his analysis?

A. Dr. Clarke's primary criticism is that aerial plant is more economic than buried plant and that it has a lower total investment cost. The results of the HAI model clearly refute this argument. As shown on Exhibit 4, Attachment 1, the overall economic impact on universal service cost of input change #1, Plant Type, is to lower the cost of universal service rather than raise it. Thus Dr. Clarke's argument, which might be true on a nationwide basis, is not true in Illinois. This is further confirmed by further analysis of the HAI results under the default assumptions which Dr. Clarke defends, and the IITA assumptions. Total cable and wire facility investment for the small Illinois companies under the default assumptions is $377 million while under the IITA assumptions it is only $344 million. The model supports the types of management decisions made by company managers in Illinois to build mostly buried plant.

Q. What additional information do you have to provide in response to Dr. Clarke's continued defense of the HAI default assumptions?

A. I note that Dr. Clarke's defense of these assumptions is simply a referral back to the HAI Inputs Portfolio documentation. I would note that in order for these assumptions to be valid, not only would one have to assume construction of a new telephone network, but one would also have to assume the current rebuild of the electric and cable TV networks at the same time. All parties would have to build their networks in a similar time frame and all would have to agree to use the same type of plant. This is a most unrealistic assumption for a number of reasons as discussed in my direct testimony. It is also unrealistic because it does not recognize the differences in cost characteristics of providing electric and telephone service that lead these companies today to provide service via different types of plant in rural areas. Attached as IITA Exhibit 4, Attachment 2 is a copy of a response to Commissioner Kretschmer discussing the nature of these cost differences.

Q. In adopting inputs for its Synthesis Model did the FCC use inputs for structure sharing closer to the HAI default assumptions or the ITA assumptions?

A. While the FCC adopted structure sharing assumptions different from both the HAI default and the ITA assumptions, they are much closer to the ITA assumptions. The FCC adopted the following structure sharing assumptions:

> For aerial structure, we assign 50 percent of structure cost in density zones 1-6 and 35 percent of the costs in density zones 7-9 to the telephone company. For underground and buried structure, we assign 100 percent of the cost in density zones 1-2, 85 percent of the cost in density zone 3, 65 percent of the cost in density zones 4-6, and 55 percent of the cost in density zones 7-9 to the telephone company.[4]

I continue to recommend to the Commission that they use the ITA proposed assumptions regarding structure sharing as they are much more realistic than the HAI default assumptions.

Q. AT&T witness Clarke proposes that the HAI default assumptions be modified to reflect different distribution and copper feeder plant cable fills. Is his rationale for these changes consistent with the rationale underlying the default assumptions?

A. It is not. His explanation for the change is that the default values "...were designed to represent measured fill at the central office, rather than be general

[4] Tenth Report and Order, CC Docket No. 96-45, FCC #99-304, Adopted October 21, 1999, Released November 2, 1999, paragraph 243.

cable sizing factors."[5] That description is not borne out by the HAI Inputs Portfolio, (IITA Exhibit 1, Attachment 3). I have attached as IITA Exhibit 4, Attachment 3 excerpts from the Inputs Portfolio supporting the default assumptions for the Distribution Cable Sizing Factors which Dr. Clarke refers to as the cable fill factors. This explanation makes no indication that they were designed to represent measured fill at the central office as Dr. Clarke opines. Rather there is a clear description which indicates how the factors are used as general cable sizing factors. The explanation that engineers are more concerned with the number of spare pairs as opposed to the percentages and that with smaller sized cables a lower fill factor is necessary to provide some spare pairs is a logical explanation why the factors should be lower in low density zones where cable pair sizes are lower. The same explanation is provided on page 58 of the Inputs Portfolio for copper feeder cable sizing factors.

Q. Does the HAI Model Description document (IITA Exhibit 1, Attachment 2) provide additional information regarding Dr. Clarke's assertion?

A. It does. The Model Description document contains the following description of the use of these factors on Page 47:

> Sizing factors are intended to provide reserve capacity above and beyond the lines requirement determined by the model. If, for instance, a given cable segment must serve 75 lines and the sizing factor set by the model is 0.50, then the target cable size determined by the model is 75/0.5, or 150. However, cables are available only in discrete sizes, as shown in Item B9 in Appendix B. The model selects the cable size at or most closely above the minimum size calculated. In this example, this corresponds to a 200 pair cable. Thus, the achieved fill is 75/200, or 0.375. Generally, the average

[5] Clarke Testimony, May 11,2001, page 12, lines 16-18.

achieved distribution fill is significantly less than is indicated by the raw cable sizing factors shown in Item B18.

This description clearly indicates that the model developers intended the cable sizing factors as general sizing factors rather than as "the measured fill at the central office".

Q. In adopting fill factors for use in the Synthesis Model, did the FCC recognize differences in the fill factors based on density zone?

A. They did. IITA Exhibit 1, Attachment 4 displays the fill factors adopted by the FCC, factors that are much closer to the HAI default factors supported by AT&T at one time, than the factors now proposed by Dr. Clarke.

Q. What is your recommendation to the Commission regarding Dr. Clarke's proposed modifications to the cable sizing or fill factors?

A. The Commission should reject Dr. Clarke's proposal. The factors supported by AT&T as the default factors for HAI model 5.0a are more appropriate cable sizing factors than are the factors proposed by Dr. Clarke.

Q. Do you agree with Dr. Clarke's proposed inputs regarding cost of capital?

A. I do not. I agree with the testimony of Staff witness Pregozen that the use of this Ameritech information from a prior period is not an appropriate measure of the cost of capital for the small Illinois companies. Dr. Clarke's proposed debt structure of almost 60% debt is not representative of either large or small telephone companies. The cost of equity from a prior period is not representative of the forward looking cost of equity of the small companies. I also agree with Mr. Pregozen's discussion of the many factors of business risk faced by small companies that need to be considered in determining their cost of equity.

Q. Dr. Clarke opines that the rural areas are "more immune to competitive penetration" than are the metropolitan areas served by rural carriers. Are rural carriers immune to competition?

A. No they are not. While most of the rural carriers do not face competition yet from competitive local exchange carriers (CLECs), virtually all of them are facing competition from wireless service providers. With a high percentage of their revenues associated with usage sensitive access charges, a much higher percentage than the large urban companies, wireless carriers are a definite competitive threat to the small companies and are causing them to lose revenues they would otherwise have. I expect that this type of competition will continue to grow and may lead to some customers actually replacing their land line service completely with wireless service.

Q. Dr. Clarke, on page 10 of his May 11 testimony, opines that the validity of the HAI default expense factors, "...has generally been affirmed by the collection of expense factors that has been adopted by the FCC for its Synthesis model." Do you agree with this assertion?

A. This assertion is made in regard several expense categories and is not accurate, at least to the extent that Dr. Clarke opines that it is. For example, the FCC made no determination of an appropriate factor for carrier-to-carrier customer service expense. The FCC's determination of billing/bill inquiry expense, which incidentally was based on a regression analysis of embedded expense levels, coincidentally arrived at a level of $3.62 per line per month, the identical number that the IITA is proposing and over twice as high as the HAI default assumption. For network operations expense the FCC uses an input of $1.48 per line per month <u>for universal service or local functions only</u>. The HAI default assumptions for the small Illinois companies generates $1.52 per line per month <u>for all network functions including the provision of access, interoffice switching, and interoffice transport.</u>

Q. Dr. Clarke proposes that fiber costs be reduced substantially from the HAI default inputs due to changes in cost since the HAI default assumptions were developed. What is your response to this proposal?

A. Dr. Clarke's choice of this one item of many costs that have changed since the HAI inputs were developed serves his desire to lower the overall cost developed by the model. While the price of fiber may have been reduced since the HAI default assumptions were developed, prices of other inputs have increased. Labor is another significant contributor to the costs produced by the model. There is no doubt that labor costs have increased since the 1996 time frame which was the basis for the cost inputs in the HAI model. If cost factors are to be updated from the 1996 time period it would only be appropriate to make adjustments for costs that have both increased and decreased, not just one input factor that has happened to decrease.

USE OF THE HAI MODEL

Q. In the testimony that has been presented, various parties propose using results from the HAI model in a variety of ways. Do you have any general comments regarding these proposed uses of the results of this model?

A. I do. In my direct testimony, when I introduced the HAI model as a tool to estimate forward-looking costs for the small Illinois companies I expressed a number of reservations regarding using the model and its results. Nevertheless, I proposed its use in a broad way as one measure to meet certain statutory criteria. While the IITA had certain misgivings about using this model, it did support the use of it in the manner proposed by the IITA. However, in this proceeding there are a number of proposals that suggest a reliance on the model for individual company results and for limitations on individual company funding that go well beyond uses for which the model may be appropriate. There are also proposals that the industry and the Commission go through annual updates, a process which is likely to be costly and time consuming. In reviewing the use of the model, I recommend strongly that the Commission recognize the weaknesses of this tool and use it in a minimal manner, rather than as a specific indicator of precise company costs and funding requirements.

Q. What statutory requirements was the JITA trying to meet when it proposed introduction of the HAI model?

A. The statute indicates that companies may be eligible funding if their "economic costs" of providing universal service exceed an affordable rate and federal support received. The term "economic costs" is not defined in the statute. The JITA assumed, based on discussions of cost issues before the Commission in a variety of cases over the past several years, that most parties would conclude that "economic costs" should be interpreted as forward-looking costs. In order to attempt to simplify this proceeding, the JITA proceeded on a course accepting that assumption and tried to fashion a reasonable result using that assumption and the limitations of the statute. However, with the specific proposals for using the HAI based studies to limit companies ability to receive funding, that assumption will be challenged and tested in this proceeding.

Q. Can you describe some of the specific proposals that concern you?

A. Yes. Staff witness Hoagg proposes that the HAI model results be used to limit and eliminate the funding for individual companies where the analysis of HAI cost compared to the affordable rate and federal support shows the company needs little or no support. At the same time he proposes that companies where that analysis shows a great need for support be denied that support and limited by the rate-of-return test.

AT&T witness Hegstrom proposes that the HAI model be used to eliminate companies from funding eligibility if their HAI calculated access costs are less than their Commission mandated access rates.

Verizon witness Beauvais proposes that companies whose HAI costs are above their Commission mandated access rates should be required to raise their access rates to the HAI cost level.

Each of these proposals assumes a validity to the HAI cost results, most at an individual company level, that is beyond a reasonable expectation for the model because of the model limitations I described in my direct testimony.

Q. What has been the reaction to these proposals?

A. Individual companies who are impacted negatively by these proposals are legitimately responding by trying to provide better estimates of their individual company costs with individual cost estimates and individual company assumptions. While I have not reviewed and am not commenting on the specific assumptions proposed by the individual companies, if the results of the HAI model are going to be used on an individual company basis, studies using the model but tailored to individual company situations are an appropriate response to some of the infirmities of the model and its results.

Q. Is the Staff position regarding the use of individual company studies and inputs consistent?

A. It does not appear to be. Staff witness Koch in his rebuttal testimony rejects most of the individual input changes proposed by Mr. Petrouske because they are based on the companies' individual embedded costs. However, Staff witness Hoagg in his direct testimony characterizes the individual company HAI results as proxies for the real costs. One can readily infer from his testimony that studies based on individual company inputs reflecting the "real" costs of the company are preferable to the HAI proxy costs and even more preferable to the average proxy cost that the ITA proposes.

Q. Does the statute limit the Commission's ability to use proxy costs to only considering the costs and not a proxy for revenues as argued by AT&T witness Hegstrom?

A. Ultimately that decision will be determined by a legal analysis. However, from my view as a regulatory expert, but not an attorney, it does not appear to include that limitation. The relevant part of Section 13.301(d) states:

> In establishing any such universal service support fund, the Commission shall, in addition to the determination of costs for supported services, consider and make findings pursuant to paragraphs (1), (2), and (4) of item (e) of this Section. Proxy cost, as determined by the Commission, may be used for this purpose.

It appears to me that the statute gives the Commission wide discretion in determining and using proxy costs in making the determinations referenced in the previous sentence. While the sentence does not mention the use of proxy revenues, it certainly doesn't prohibit it. If the Commission chooses to use as a proxy for its determination the cost of the small companies as a whole, it would not be at all reasonable for the Commission to use the revenues of the companies as a whole in meeting the tests described. This is particularly true in light of the Commission's expressed intent to impose a non-statutorily based earnings limitation test on USF funding as well.

Q. Mr. Hoagg, in his Direct Testimony, criticizes the IITA proposal to use HAI results compared to revenue and support results for the small Illinois companies as a whole for a number of reasons. Can you comment on his rationale?

A. Yes. First Mr. Hoagg argues that the IITA has not met a burden of proof to show that its method is superior to his method which, in his terms, "...meaningfully takes account of individual company HAI results." If Mr. Hoagg's methods meaningfully took account of all individual company HAI results, I might agree with him. However, the proposal of Mr. Hoagg only takes meaningful account of individual HAI results that eliminate a company from consideration for funding. If the HAI results show the company needs large amounts, those results are discarded via the earnings test methodology.

Second, as discussed above, Mr. Hoagg appears to argue for individual company studies rather than the HAI studies that he characterizes as proxy studies, while fellow staff witness Koch, dismisses such studies as inappropriate.

Third, Mr. Hoagg argues that the use of the HAI studies as proposed by the Staff "...should not prejudice inappropriately the interest of any IITA company." I have prepared an analysis that clearly demonstrates that the interests of several of the small Illinois companies interests will be substantially prejudiced.

Q. Would you please describe the analysis that you have conducted?

A. Yes. Under the proposal of staff as developed in Staff's rebuttal testimony, Mr. Koch, in Staff Exhibit 8.0, Schedule 1 identifies eight companies who are totally precluded from receiving IUSF support as a result of the HAI limitation proposed by Mr. Hoagg. I have analyzed the impact on these eight companies of this IUSF funding limitation proposal. ITA Exhibit 4.0, Attachment 7, provides this analysis. Two alternatives are presented, the first based on the initial amounts requested by the companies to achieve the agreed upon rate of return, the second based on the staff recommended support amount to achieve the same return. For each company the support amount necessary to achieve the appropriate rate of return is divided by access lines and by twelve to calculate a support amount per line per month. That amount is then added to the average basic service rate for the company to estimate the rate that would be needed to provide basic service, absent any IUSF support.

The results of the analysis shows that only one of the companies, Harrisonville, would have a rate less than the affordable rate of $24 proposed by the staff. One other Odin would have a rate only slightly above that amount. For the remainder of the companies, under staff's analysis of the needed support level, the rates for the companies range from $39.01 to $79.21 per month. These rates, for basic service only and excluding federal SLC charges, taxes, surcharges, etc., are between 62% and 229% above the Staff proposed affordable rate. I believe this analysis clearly demonstrates that the interests of some of the IITA companies will be prejudiced.

Q. AT&T witnesses Clarke and Hegstrom advocate the use of average HAI costs across all the companies, but proposes that they be evaluated against individual company revenue and support measures. What is the flaw in this type of analysis?

A. There are real cost differences between the companies in the Illinois group, although the AT&T witnesses apparently recognize that the HAI model does not do a particularly good job at accurately identifying those differences by company. While the average cost may be a fairly good representation of the group as a whole, it does not represent the cost of each individual company well at all. If this average cost is attributed to all the companies individually, but compared to revenues and support amounts that are based on higher or lower actual costs, the resulting USF funding will be inappropriately distributed between the companies. The use of the average cost, as proposed by Ms. Hegstrom, produces the same overall support level, but distributes a higher portion than necessary to low-cost companies and a lower portion than appropriate to high-cost companies.

Q. What is the appropriate use of the average cost then?

A. The appropriate use is that made by the IITA in its initial proposal. The overall costs developed by the HAI model are compared to the revenues and support revenues received by the total group of companies to determine whether the companies as a whole pass the statutory test. The embedded earnings analysis, as required by the Commission is then used to determine the funding level for the individual companies based upon their earnings need.

Q. *Ameritech witness O'Brien on pages 2 through 4 of his rebuttal testimony discusses the infirmities of the HAI model and supports the use of the embedded earnings test as the sole means of determining IUSF funding. Do you agree with his discussion and conclusion?*

A. I do. As Mr. O'Brien has aptly pointed out, there are many concerns with the use of the HAI model, with varying inputs for the model, and with the results of those models. He properly concludes on page 3 of his testimony that the HAI model should only be used as a "...general acknowledgement of the Section 13-301(d) requirement..." and that the model cannot be used "...for any cost/revenue comparisons for any individual company." His conclusion is that "...the Commission should afford no weight to the HAI model, whether for a specific company or in total, when determining the amount of any high cost funding needs." Mr. O'Brien then supports the use of the general methodology proposed by the Staff and the IITA in conducting an earnings analysis to determine IUSF funding. I agree wholeheartedly with Mr. O'Brien.

Q. *Does the recent order of the FCC in regard to the recommendation of the Rural Task Force support the concerns that Mr. O'Brien has regarding the HAI model?*

A. Yes. While the FCC's order specifically addressed the Synthesis Model, the observation of the FCC, quoted by others in their testimony, that the forward-looking costs of rural telephone companies cannot be determined at this time, supports the concerns expressed by Mr. O'Brien and the recommendation of both Mr. O'Brien and the IITA that the HAI model only be used on a broad proxy basis for the Illinois companies as a whole to meet the requirements of the statute.

SERVICES TO BE SUPPORTED

Q. Have the parties, in their direct and rebuttal testimonies filed in May, differed significantly over the list of services that should be supported?

A. Not significantly. Most of the parties have supported the list of services adopted by the FCC as an appropriate list of supported services. Verizon witness Beauvais has added to that list one item to the list, white pages directory listings, and has clarified the definition of access to interexchange carrier by adding "of the customer's choice" to the end of that item. As Mr. Beauvais recognizes, the cost of the white pages directory listing is relatively small and not of significant consequence. While the clarification of access to interexchange carriers provides a clarification, I do not believe it changes the requirement at all since federal statute and federal and state rules require the provision of presubscription as the means of offering access to interexchange carriers and thus the customer choice requirement is implied in the requirement as it is stated by the FCC.

Q. Are you aware of the recently passed Illinois statute requiring the provision of advanced telecommunications services to 80% of each company's customers in the next three and a half years?

A. I only became aware of it in the past two to three days. As I understand it, the statute is still awaiting the governor's signature. If this act is signed into law, the Commission should give careful consideration to the need to add the provision of advanced telecommunications services to the list of supported services. Given the basis of the funding proposed by the IITA that is associated solely with the embedded cost earnings analysis, adoption of this provision will not immediately affect the funding results and can probably be delayed until the next phase of this proceeding. However, I should point out that the adoption of this legislation largely alleviates one of the concerns expressed by Staff witness Hoagg about solely using the embedded cost earnings levels to develop the IUSF funding amounts. He expressed the concern that some companies might build networks of the type now contemplated by the legislation awaiting the governor's signature and receive funding for such networks under the embedded funding method. Given the expressed requirement of the legislature such a result would apparently be entirely appropriate.

Q. Although there was general agreement regarding the list of supported services, there were varying positions regarding what lines should be supported. What is your position in regard to this issue?

A. The discussion of what lines should be supported becomes relevant, in my mind, in two different instances. First, if the level of funding is based on some calculation of individual line support the number of supported lines becomes relevant in determining the amount of support. Second, if support from the fund is portable to competitive providers the issue becomes relevant as to what specific support is portable. At this time in this proceeding neither of these factors are particularly relevant and the Commission needs to make no decision regarding this issue.

Q. Why do you say that?

A. In regard to portability the statute regarding Section 13-301(d) specifies that IUSF funds from that fund are only available to companies who were receiving support under the current high cost fund and DEM weighting fund. The parties have agreed to delay the discussion of portability of the IUSF and whether and when the IUSF funds proposed under Section 13-301(d) would transfer to a 13-301(e) fund which could be portable. Thus the issue of portability will be discussed in a later phase of this proceeding.

Second, under the proposed funding determination proposals by various parties in this case, the primary determinant of the IUSF funding amount is the overall company embedded cost earnings determination. This funding determination is limited by an amount needed to achieve a given earnings level of the company irrespective of the number of lines the company serves. Thus the number of supported lines has no relevance to the determination of funding, as proposed by the parties in this case.

Q. Does the IITA have a position on this issue if the Commission makes a determination?

A. Yes. The IITA supports the provision of IUSF funding to all the companies lines consistent with the FCC method of providing federal support.

THE AFFORDABLE PRICE FOR SUPPORTED SERVICES

Q. In arriving at an affordable rate as described in the statute what characteristics should the Commission have in mind in determining the affordable rate?

A. First, the Commission should keep in mind that the issue of affordability is to be judged in the context of the public policy goal of providing "universal" local telephone service. Thus, the concept of affordability should be judged in terms of a standard which will provide service at a rate where the vast majority of customers can and will purchase local telephone service at the determined rate. Second, the affordable rate described in the statute is the rate for basic service, but the affordability of that service will depend not only on the rate for basic service, but the additional rates and charges (federal SLC, taxes, mandatory surcharges, etc.) Third, the FCC has given the state commissions the responsibility of taking into account such factors as local calling areas, socio-economic factors, etc. in determining the availability of universal service. The Commission should consider such factors in making its determination.

Q. On Page 8 of his testimony Staff witness Staranczak argues that consideration of the local calling area as a factor in determining affordability is not relevant because it is based upon a "value of service" concept. Do you agree with his argument?

A. I do not. Primarily I do not believe that consideration of the local calling area is a "value of service" concept. I believe the size of the local calling area has a direct bearing on the affordability of local service.

Q. Can you explain in detail how the size of the local calling area affects the affordability of basic local service?

A. I can. Customers use telephone service for a variety of communication needs. These include such things as arranging medical services and ordering prescriptions, checking on the availability and cost of materials and services for a wide variety of personal needs such as home and car repair, purchase of clothing, recreational needs, etc., communicating with educators regarding their children's educational needs, participation in community and church activities, contact with emergency services and essential government functions, and social contact with friends and relatives. In areas with large local calling areas most of these communication needs fall within the local calling area and are provided through the provision of basic local service. As the size of the local calling area diminishes, fewer of these communication needs are met within the local calling scope. In an exchange such as Kinsman, with less than 100 customers in the local calling scope very few of these needs will be met within the local calling area. In order to meet these communication needs, the customer must purchase intrastate toll services at usage sensitive prices. The need to purchase toll services to meet these essential communication needs reduces the customer's funds available for the purchase of basic local service and thus directly affects the affordability of local service.

Q. *Does Dr. Staranczak recognize that factors such as income and socio-economic status have an impact on affordability?*

A. He does. Throughout his direct testimony he recognizes that what is affordable in one area of the state or country may be different from what is affordable in another area of the state or country due to such factors. Yet his recommendation is that a single affordable rate be established for all parts of the state.

Q. Dr. Staranczak includes in his testimony six possible methods for determining an affordable rate. What is your reaction to these methods?

A. While each has some rationale for consideration, most of them have significant arbitrary factors associated with them. Others would be difficult to determine until after the fact. For example, one of his alternatives is to use 200% of the Ameritech Band "C" rate. While there is some logic to using the rate for the less urban areas served by Ameritech the choice of twice the rate is totally arbitrary and has no basis. If the Ameritech rate is to be used, and the Commission has found it to be just and reasonable, I would suggest that it would be more appropriate to use the $13.00 rate itself, rather than twice the rate. This would be much more consistent with provisions of the Telecommunications Act of 1996 which, in one of the principles for developing universal service, states that services in rural areas should be "...available at rates that are reasonably comparable to rates charged for similar services in urban areas."

Another recommendation of Dr. Staranczak is the use of a "level that does not adversely affect the penetration rate." He suggests that because of the relative inelasticity of local service that this rate might be quite high. However, if one reviews the current penetration rate for local service in Illinois which has been declining and is one of the lower rates in the country, the data suggests that in Illinois as a whole that the current rates may already be adversely affecting the penetration rate. Data on the Illinois penetration suggests that using the current rates might be fully appropriate.

Q. Ultimately Dr. Staranczak chooses as the basis for his recommended rate of $24 for residence customers option #3 of the methods he presents. Can you comment on this option?

A. Yes. This method is based on a Bureau of Labor statistic cited by Dr. Staranczak that the average urban wage earning household spends 1.2% of its income on local telephone charges. Dr. Staranczak uses this ratio (but arbitrarily doubles it) to multiply against a low income household income of $15,000 to arrive at a cost of local service including all federal and local charges, surcharges, taxes, etc. to arrive at a total rate of $30. From this he subtracts $6 for the federal SLC charge, mandatory surcharges and taxes to arrive at his proposed affordable rate of $24. Dr. Staranczak admits that the doubling of the factor is an arbitrary adjustment and subject to question. While this methodology uses a number of reliable national sources as the basis for its development, the arbitrary decision to double the income percentage is not justifiable. Using the sources and methodology otherwise one would arrive at a total rate of $15 and an affordable local rate excluding taxes, the federal SLC, and mandatory surcharges of $9.

Q. Is there other factual evidence that the Commission should consider in arriving at an affordable rate?

A. Yes. Harrisonville witness, Mr. Hoops cites additional appropriate national statistics that are relevant to the determination of the affordable rate. These include:

1. A national urban rate average of $20.18
2. A national urban median rate of $19.57
3. A national urban average rate of $19.87

Each of these rates is extracted by Mr. Hoops from FCC sources and studies. As he explains, each of the rates include all charges for local service (state and federal charges, taxes, etc.)

In arriving at an affordable rate for basic service recognition should be given to these additional charges and they should be subtracted from the overall charges for local service to arrive at the rate for basic service. Based on Dr. Staranczak's estimate of $6 per month for these charges and using the FCC average data, one arrives at an affordable rate in the $13 to $14 range.

Q. Dr. Staranczak recommends an affordable rate for business service at a higher level ($27) than for residence service ($24). Do you agree with this recommendation?

A. No. While Dr. Staranczak criticizes "value of service" concepts specifically in regard to considering the impact of local calling areas on the affordability of rates, he apparently has not qualms about using such principles to support a different affordable rate for business than residence customers. His explanation for this difference is that "…business rates are typically a few dollars more than the residential rate…" This comment is based on historical tendencies to charge business customers more than residence customers for "value of service" reasons. In today's environment it is becoming more and more difficult to distinguish between residence and business customers. Some companies no longer make that distinction in their tariffs. I would strongly recommend that this historic artifact not be carried forward into the affordable rate concept and that a single rate be established for all customers.

Q. Have you prepared a schedule showing the average basic local service rate for the companies and the average rate including the additional charges such as the federal SLC, taxes, and mandatory surcharges?

A. I have. IITA Exhibit 4, Attachment 8 is that schedule. I have prepared this schedule to sort the companies from the highest to lowest based on their total payment for local service. The schedule shows for each company the total charge for local service including the additional charges and the difference between the local service rate and the total rate. The schedule shows that on average (a numeric average) the small Illinois company customers pay over $7.50 in additional charges (taxes, federal SLC, mandatory surcharges) above the local service rate. Only two of the companies have total charges less than $10 and only seven have total charges less than $20. This demonstrates that for most of the companies the total charge for local service is above the national average and median rates at this time and that the current rates for the vast majority of the companies is a reasonable estimate of the affordable rate.

Q. What is your recommendation regarding the affordable rate?

A. I continue to recommend, as I did in my direct testimony, that the affordable rate for basic local service be set at the company's current rates. If the Commission is persuaded by the arguments of other witnesses to use a single statewide rate, I would recommend a rate in the neighborhood of $13 to $14 based on current nationwide average rates for total service cost less a $6 estimate of other charges. Finally, I recommend that the rate for residence and business customers be set at the same level.

ACCESS CHARGE ISSUES

Q. What are the proposals of various witnesses regarding access charges as it relates to this docket?

A. There are two very different proposals regarding access rates. Verizon witness Beauvais suggests that ITA companies that have access rates less than the indicated HAI cost should raise their access rates to the levels indicated by the HAI cost, thus increasing access revenues and reducing revenues needed from the IUSF under the embedded cost methodology. AT&T witness Hegstrom, on the other hand, focuses on the companies whose access rates are above the HAI costs (she uses a variety of average HAI access costs) and recommends that those companies be ineligible to receive IUSF funding at all.

Q. Do you agree with Mr. Beauvais' recommendation that the ITA companies whose HAI costs are greater than their current access rates should be required to raise those rates?

A. No, for a number of reasons. First, this proceeding is not a proceeding about access rate levels and the appropriate method for determining access rates. While I do not disagree with Mr. Beauvais' comment that it may be time to terminate the long-standing Commission policy of mirroring interstate access rates (with some adjustments and exceptions), there is not the time and the issue has not been included as an issue to be dealt with in this proceeding. Second, because of the concern about the validity of the HAI data and results in general which I have covered in greater detail elsewhere in my testimony, I am not at all comfortable accepting the results of the HAI model as the method for establishing access rates, either using the individual company results or the averaged "proxy" results. Mr. Beauvais' recommendation, if it is to be considered, should be done at a different time and in a docket that is specifically dealing with the establishment of access rates.

Q. Ms. Hegstrom quotes portions of the statute in her response that leads to her recommendation that if "...some level of implicit subsidy exists for any given company, that company should be ineligible for any state universal service funding." Does the statute either require or authorize such a recommendation?

A. I do not see anything in the statute which could be construed to either require or authorize such a recommendation. The statute speaks to the need to identify such subsidies and to determine how they can be made explicit. There is no requirement in the statute related to the small companies that such subsidies must be eliminated before a company can be eligible for receiving funding. Ms. Hegstrom's recommendation appears to be her attempt to limit the size of the fund by making many companies who are following the Commission's orders regarding the establishment of access rates suddenly ineligible for IUSF funding.

Q. Is Ms. Hegstrom's recommendation consistent with the expressed intent of identifying the subsidies?

A. It is not. The statute indicates that the Commission should "...determine how such subsidies can be made explicit by the creation of the fund." Ms. Hegstrom's